

## CREATIVITY-BOOSTING INTERACTIVE METHODS AND TECHNIQUES – KEY ELEMENTS IN THE DIDACTIC STRATEGIES

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**Abstract.** *The history of pedagogy and psychology has witnessed significant transformations which have led to the contribution of a pedagogical trend known as modernist and post-modernist education. According to this theory, the teaching-learning-evaluation act consists in a guided and programmed activity undertaken in a stimulating atmosphere, devoid of any constraints, in an interhuman relation of collaboration, communication, evaluation and self-evaluation. The teacher's role within this approach will be a coordinative one, helping the appearance of ideas. The didactic methods and techniques that are part of the didactic strategies have been classified by different authors as follows: teaching-learning-evaluation methods and techniques; consolidation methods and techniques; knowledge systematization and evaluation methods and techniques; problem solving and creativity boosting methods and techniques; group research methods and techniques. We have chosen to present the creativity-boosting methods and techniques that can be used in the didactic process of the Musical Education class.*

**Key words:** imagination, creativity, interactivity, cooperation, modern education.

### Introduction

#### 1.The interactive didactic strategies (I.D.S.) in the context of the modern and post-modern education

During the development of the human society, two educational systems have come to light, a traditional one and a modern one. The modern and the postmodern education have appeared as alternatives to the traditional education based on learning as a process of gathering and storing knowledge, skills, and habits.<sup>1</sup> So, a theory came out according to which the teaching-learning-evaluation act has to be a directed, programmed activity, involving a cognitive and emotional effort, carried out in a user-friendly and efficient way. Within the group of pupils/students, an atmosphere of collaboration, communication, evaluation and self-evaluation should be created, based on the coordination of the common efforts, through a reciprocal message exchange. That is why the organization of the pedagogic act (projection, application, analysis, appreciation) has to rely on efficient didactic strategies by which the teacher should facilitate the pupils'/students' "access to knowledge and to the development of their intellectual skills, habits, abilities, feelings and emotions, by means of a complex and circular set of methods, techniques, educational means and forms of organization of the complementary activity"<sup>2</sup>.

In the postmodern school, the tendencies to diversify these types of strategies reconsider the relation teacher-pupil/student, in which dialogue and negotiation lead to an efficient and autonomous learning. The pupil/student makes decisions concerning the learning options, the way in which the acquired knowledge will be used and evaluated. The

<sup>1</sup> Boghici, C.-Sisteme de educatie, Ed. University Press, Targoviste, 2009, p. 5

<sup>2</sup> Oprea, C-L., op. cit. pp 241-242

relation between the members of the group becomes more intense, cooperation, mutual help, taking on one's responsibilities, learning from one another will become factors that will turn the instructive-educative process into a more dynamic one. The creative teacher will determine a stimulating climate, creating and supporting the joy of learning.

The interactive didactic strategies aim to develop the young person in the context of social interactions favoring the formation of cognitive and socio-affective support with a view to highlighting their "intellectual and psychological profile" and at the same time to integrate the individual in the society.

The didactic strategy is a "complex and circular set of methods, techniques, educational means and complementary forms of activity organization, based on which the teacher elaborates a work plan with the pupils, in order to realize an efficient learning"<sup>[3]</sup>.

## **2. Classification of the interactive group methods and techniques**

A modern, progressive education (Jean Piaget) is one assuring a methodology focused on the combination of the didactic activities of: learning, independent work, cooperation, group learning, interdependent work. From all the classifications of the interactive group methods and techniques proposed by the prominent personalities of the Romanian pedagogy and psychology, we have chosen the one proposed by Crenguta-Lacramioara Oprea, who groups them according to their main didactic function<sup>[4]</sup>.

1. Interactive group teaching-learning methods and techniques: reciprocal teaching-learning method, the Mosaic method, Comprehensive learning, Waterfall, STAD- the Method of learning in small groups, The method of team contests, The method of swapping pairs, The Pyramid method, Dramatized learning, Heuristic conversation, Group debate and discussion, Group problematization, Didactic game, Case study, etc.

2. Interactive methods and techniques meant to consolidate and systematize the pupils' knowledge and to provide an alternative check-out/evaluation of their knowledge: cognitive/conceptual map, Matrixes, Cognitive chains, Causes and effects diagram, Cobweb, The Lotus Flower Technique, The RAI method, Lighted cards, Individual and/or group portfolio, Reflexive diary, Case study, Investigation etc.

3. Creativity-boosting problem solving methods and techniques: Brainstorming, Stellar explosion, The Method of the Thinking Hats, The Carousel, Multi-voting, Round Table, Group Interview, Philips 6/6, The 6/3/5 Technique, Creative controversy, The Frisco Method, Synectics, The Delphi Method etc.

4. Group research methods: group research topic/project, team experiment, group portfolio, etc.

We will focus (selectively) on the methods and techniques applicable in our domain of interest as well. The teaching-learning-assessment methods for music are present in the configuration of the (global) system of general methods; some of them have a higher frequency of application than others, depending on the specifics of the domain and also on the purpose one wants to attain.

## **3. Specifics of the creativity-boosting methods and techniques used in Musical Education.**

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<sup>3</sup> Ibidem

<sup>4</sup> Oprea, C-L., op. cit. pp. 256

The presentation and the description of the didactic methods that we are about to exemplify will be related to the curricular cycles and/or to the study levels.

From among the methods that can be used to develop imagination and creativity we will select just a few, namely those based on interactive learning.

**3.1 Brainstorming** is an interactive method in which the solution of the debated problem is found using debates, discussions, new ideas. Each of the subjects comes with a new, personal idea, so as to emit as many solutions as possible, and by combining them they find the “key” for solving the debated problem. The Brainstorming method can be applied in order to solve some musical language elements (harmony, polyphony, orchestration, forms), to realize musical pieces or to interpret them. The work atmosphere is relaxing, disinhibiting, allowing the emission of new daring ideas, giving free rein to imagination, causing a chain reaction. The method was made known by Alex F. Oletanu in 1953 (Buffalo University, USA) and relies on four rules according to the scheme: “looking for ideas, postponing the judgement of the ideas, large quantity of ideas, fertile idea exchange”.

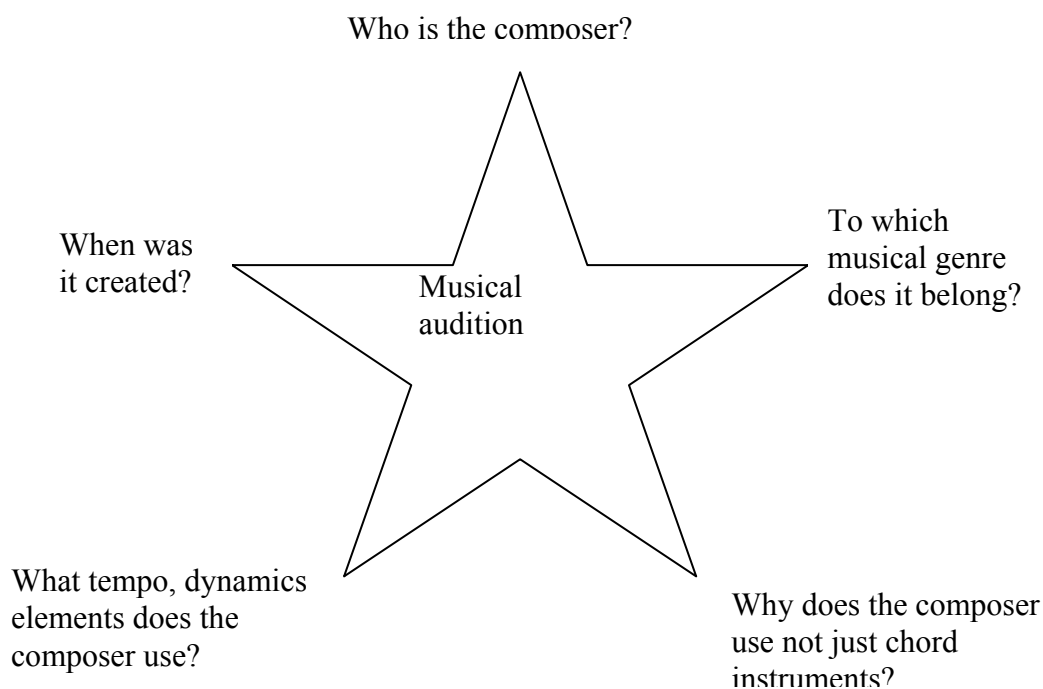
The two specific moments of this method are idea production and idea evaluation.

teacher → explaining the problem → triggering ideas (idea explosion) → selecting the good ideas → evaluation (critical appreciations) → solving the proposed problems.

### 1. Hypothetical scheme of the Brainstorming method

**3.2 The stellar explosion** is a method that is very similar to that of Brainstorming, stimulates creativity and its specifics is the fact that it begins from the center of the concept (problem) in order to radiate afterwards from the center the multitude of questions (just like a stellar explosion) which can lead to solving the problem proposed.

In the teaching-learning process during the Musical Education classes it can be applied in many cases: the history of music, stylistics, musical esthetics, musical theory etc. We will present a scheme of the way in which it could be used in musical audition (musical language elements analysis).



**3.3 The Philips 6/6 Method** consists in the formation of six groups, which are to emit new ideas for 6 minutes starting from a given topic. It is similar to brainstorming and to the 6/3/5 Method, its purpose being the intensification of the creative spirit. The organization of the group consists in the determination of their responsibilities (4 members, 1 secretary, 1 group leader guiding the discussions and drawing the conclusions).

The advantages of this method consist in facilitating communication, outlining a large number of ideas in a short while, stimulating creativity and imagination, cooperation and competition for all the group members. An example of application in music could be in the domain of musical history, musical stylistics, musical theory, the theory of music etc.

**3.4 Synectics** is the method of the analogies/associations of ideas and belongs to Professor William J. Gordon, 1961, Harvard University. The semantics of the word is “bringing together diverse elements” (Synecticos). This method encourages the appearance of ideas, the modification of some of them and their combination “as a result of the permitted analogy”<sup>[5]</sup>, the combination among the elements.

The purpose of this method is the full freedom of expression of its participants, the development of initiatives for expressing original ideas, for associating them and for bringing together “elements that apparently have no connection between them”<sup>6</sup>. The teacher has the role to encourage the pupils/students to think in a nonconformist manner (while trying to find solutions), and to make use of digression. The evaluation of the result obtained will take into account the “following indicators: ideas emitted during the stage of the synectic itinerary, classification of the solutions proposed, experimentation and application of the summative model”<sup>[7]</sup>.

By means of synectics, the unknown becomes known, the incubation stage is covered, the “emergence of new ideas is favored” (concerning the proposed problem), the accent falls on psychological conditions, on unreal, euphoric feelings that in their turn trigger the appearance of new solutions.

Synectics has advantages and disadvantages, just like brainstorming, but the teacher, as a good discussion manager has to be a good psychologist and must possess special empathic qualities.

Synectics can be used during a higher stage of education, such as in university.

**3.5 Consecration** is a method opposed to synectics and consists in breaking the problem that had seemed unitary up to that moment into smaller pieces. During musical education classes, the method can be applied - depending on the class level - during elementary and secondary school, in approaching a composer, a stylistic manner, a musical trend etc.

**3.6 The case study** is the method that places the subjects into real life situations, representative for the solution of other situations or problems. In the beginning it was applied in medicine, economy, psychology etc, as a research method, and later on it spread to the educational system as well.

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<sup>5</sup> Metacognitive skills – the individual’s ability to know his/her own thinking, behavioral processes, by comparison to the others, leading to self-evaluation and self-regulations

<sup>6</sup> Oprea, C-L., op. cit. pp. 256

<sup>7</sup> Oprea, C-L., op. cit., p. 227

This method has a heuristic and applicative value, its purpose being: introducing the participants to complex true realities, in order to get used to possible situations, developing “optimal decisional, operative skills and abilities to solve eventual problems”<sup>[8]</sup>.

Within this method, the professor has a secondary role, triggering the action, mediating possible conflicts, stimulating an active individual and group participation.

The interactive methods and techniques, as didactic function, can be used alternatively during the lesson, if our time budget allows it so as to stimulate activism and creativity, to create a dynamic and interactive learning environment based on cooperation. They help develop an investigative spirit and a divergent thinking, which help the pupil/student get used to a methodical learning after his graduation as well, in other words they train the pupil/student “to learn how to learn.”

In the domain of Musical Education there have been pioneers of the modern musical education system. Personalities such as: Martenot, Montessori, Dalcroze, Wilens, Kabalenski, Kodaly, Orff, Suzuki, Edlund, Gedalge etc. have created musical education methods centered on didactic activities that train the pupils/students in complex situations in order to stimulate their imagination, creativity, and inventiveness.

Although moving on with less huge steps than other domains (pedagogy, psychology) the Romanian musical education system has gone through significant transformations during the last few decennia, their outcome being truly modern educational systems that we would like to refer to in a future approach.

## References

- [1]Antonescu, G. - *Educație și cultură* (Education and Culture), EDP, București, 1972
- [2]Boghici C.- *Sisteme de educație* (Educational Systems), University Press, Târgoviște, (2009), p.14-15
- [3]Coman, L. - *Pianistica modernă* (Modern Piano Lessons), Ed.U.N.B, București, 2006
- [4]Csire, I. - *Educatia muzicală din perspectiva creativității* (Musical Education from the Perspective of Creativity), U.N.M.B, București, 1997
- [5]Munteanu, G. - *Modele de educație muzicală* (Models of Musical Education), Ed. Fundației România Mare, București, 2008
- [6]Parnisoara, I.-V. - *Comunicarea eficienta. Metode de interacțiune eficienta* (Efficient Communication. Models of Effective Interaction), Ed. Polirom, Iași, 2003
- [7]Oprea, C.-L.- *Strategii didactice interactive* (Interactive Didactic Strategies), E.D.P, RĂ, 2008
- [8]Roșca, Al. - *Creativitatea* (Creativity), Ed. Enciclopedică România, București, 1972.

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<sup>8</sup> Munteanu, G., *Didactica educatiei muzicale*, Bucuresti, Editura Funadtieie Romaniei de Maine, 2007, p. 131